

ABSTRACT OF THE DISCLOSURE

A method for evaluating an input system interfacing a human user with an electronic device uses empirically determined bi-action times for users to perform a second input
5 action (e.g., pressing a second key) immediately after performing a first input action (e.g., pressing a first key). The bi-action times (or, more generally, n -action times) are used together with a selected interface map which associates input actions (e.g., pressing keys) to corresponding signifiers (e.g., characters) to calculate a peak expert input rate for the input system. One or more optimized interface maps can be found by combining the
10 evaluation method with any of various optimization strategies. For example, one method for optimizing the input system repeatedly changes the interface map and recalculates the peak expert input rate, while another optimization method calculates peak expert input rates for multiple interface maps in parallel. The evaluation and optimization methods apply to a wide variety of users, input devices, and types of communication and control
15 between them.